



SPI SOLUTIONS, INC

Summary Comments in response to :

PROPOSED RULES

FEDERAL COMMUNICATIONS COMMISSION

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Review of Regulatory Requirements for IP-Enabled Services



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Corporate Overview

SPI Solutions, Inc., incorporated in Delaware has substantial experience in education, security, computer hardware, software development, wireless and radio frequency technology, sales, marketing and accounting.

We are proudly American, and all of our research and development is performed right here in the United States. We tightly control the development process and closely manage the quality of our products. We listen to our customers and build their ideas and suggestions into our products.

Our management team has many years of experience in application development, information management, communications, storage, translation technologies, and security-related solutions.

SafetyPatrol – the future is here

Our “SafetyPatrol” product line includes the ability to call 911 services over the internet using IP and VOIP, automated emergency response calling, mass-broadcast to any device and security solutions for Kindergarten through 12th grade public and private schools.

Our products tightly integrate software with radio frequency identification, imaging, message delivery, automated emergency calling, internet, voice and wireless technologies. SafetyPatrol provides unique products in the industry, tailored specifically for the management of school security, student evacuation, victim recovery and real-time mass communications.

Our R&D efforts are reaching towards deploying web-enabled 911 initiation services from IP enabled mobile devices including cell phones, PDA’s laptops etc.

We have a provisional patent with the U.S. Patent and Trademark Office.



Broadband as an emergency response medium.

The rapid proliferation of broadband availability and usage in commercial and residential areas together with the convergence of mobile communication technology as internet clients, has necessitated the re-examination of traditional emergency calling and response methods and technologies.

The expanding coverage of wireless internet availability, and the inevitability of roaming internet connectivity becoming as ubiquitous as cellular renders the medium ideal as an emergency reporting and response transport.

Web-based 911 calling

In anticipation of this, SPI Solutions, Inc has developed a web-based system “SafetyPatrol”, that enables any web-enabled device to initiate a threat-specific 911 call over the internet, and interfaces with VOIP carriers to identify location and direct the call ultimately to a region-specific 911 response center via conventional phone lines.

Our system currently functions in an intranet-based campus environment, augmenting and replacing PABX systems by transmitting the exact location and threat specific information automatically when initiated from a web-enabled device.

Consideration needs to be given to the universal deployment of this model over the internet, and how e911, IP-enabled and VOIP emergency calling and response systems are governed.

Regulatory Considerations

In SPI’s opinion, regulatory communication standards need to be established to ensure compatibility, security and reliability between messaging devices and IP based transport services in order to stimulate and govern the development of compatible software and equipment. It is essential that 911 response centers are appropriately equipped to handle IP-based calls and packetized digital messaging in addition to VOIP and conventional voice.

In addition, consideration needs to be given on how these devices together with their increased level of automation, enable physically challenged, young and elderly persons to initiate 911 calls when they otherwise could not, using a convention telephone.

Message Transports

911 message transports in development shall include the spectrum of media. These include:

- POTS
- VOIP
- DSL



- Cable
- Wireless
- Cellular
- PCS
- SMR

These diverse points of initiation ultimately need to be controlled within message standards and security methodologies, and converged into a common transport so that they can ultimately be delivered to 911 response centers to minimize the hardware and equipment upgrades required by the response centers.



Summary of SPI's Product Capabilities

SafetyPatrol e-ID

SafetyPatrol e-ID seamlessly and invisibly tracks everyone entering the building, their movement around the building and their exit. All activities are logged in a central database. This links to e-Attendance and e-Notify, the automated attendance system and absentee notification system and to the vehicle management module.

SafetyPatrol e-911

SafetyPatrol e-911 is integrated within the SafetyPatrol Suite application. In addition, it places a 911 icon on every computer desktop. With a simple and silent click of a mouse button, SafetyPatrol e-911 displays a pop-up and color-coded "Threat Menu" which describes various possible situations. When an option is selected, SafetyPatrol e-911 initiates a call to 911, identifies the location and room number, and describes the threat. It sends multiple textpagers and/or email messages to emergency respondents and security. This is ideal in a duress situation when reaching for a phone or other means of communication is impossible.

SafetyPatrol e-Notify

SafetyPatrol e-Notify is part of the SafetyPatrol e-Attendance module. Student attendance is automatically tracked, and in the event of an unauthorized absence, e-Notify automatically sends a message to parent's phone, email or text-pager address.

SafetyPatrol e-Vacuation

SafetyPatrol e-Vacuation is a mobile and portable evacuation module that identifies individuals who vacated the building, and provides the location of those who did not. Its mobile SafetyPatrol e-ID interface allows a reinventory of all personnel at the evacuation site to ensure that all individuals who left the building are accounted for. In addition, casualty medical information is instantly available. SafetyPatrol e-Vacuation is wirelessly linked to the SafetyPatrol e-Broadcast system, and the remote SafetyPatrol Command Center, enabling mass messages to be transmitted selectively to students, parents, staff and visitors.

SafetyPatrol e-Broadcast Pro

SafetyPatrol e-Broadcast Pro is a powerful, database-driven communication system. It enables mass transmission to email addresses, alpha pagers, and text-capable cell phones. In addition, selecting the Phone option activates the powerful Text To Speech engine that translates a typed message into a digitized voice, and the voice message is delivered to phone numbers. Messages can be sent to selective, or entire groups of people using a user-friendly email-type popup-window. SafetyPatrol e-Broadcast Pro is capable of delivering hundreds of messages per minute. The e-Broadcast engine is a dedicated, multi-threaded design, independent of any existing email or voice system. Its advanced parallel processing capability scans the database for phone numbers, email and pager



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addresses and provides rapid-fire delivery of emergency and other notifications. Integrated with SafetyPatrol e-Notify, SafetyPatrol e-Broadcast Pro notifies parents of student absences.